

3.0 AFFECTED ENVIRONMENT

3.1 Natural Resources

Water Resources

NPS Property

Water flows on the NPS property were mapped as part of the Biological Resources Inventory Report, which can be reviewed in Section 5.5 of the Appendix.

The natural drainage patterns of the NPS Property have been altered as a result of past human activity. Rainfall may infiltrate the soils of the property unimpeded by impervious surfaces. In general, drainage follows a depression that leads from west to east across the property. A perennial stream, partially fed by spring flow from the abutting property to the north, is present toward the eastern extent of the NPS Property. Runoff from the NPS Property and surrounding properties drains into the stream. The stream flows east into a culvert beneath an earthen berm that covers a sewer line at the eastern edge of the property.

Wetlands are permanently present on the property in association with the stream.

No portion of the NPS Property is within a Federal Emergency Management Agency-designated 100-year floodplain.

Groundwater flow on the property is unconfined. Groundwater is not used as a source of drinking water or other water supply in the vicinity of the NPS Property.

Mansion Property

The natural drainage patterns of the Mansion Property have been altered as a result of human activity over years, including the development of the Brady mansion and associated facilities. On a majority of the property, excluding the severely compacted land developed with the past mansion and associated facilities, rainfall may infiltrate the landscaped grounds unimpeded by impervious surfaces. In general, drainage occurs overland away from the crests of two knolls located on the property.

There are no perennial streams on the Mansion Property, no wetlands are present on the property, and no portion of the Mansion Property is within a FEMA-designated 100-year floodplain.

Groundwater flow on the property is unconfined. Groundwater is not used as a source of drinking water or other water supply in the vicinity of the Mansion Property.

Georgetown Properties

The natural drainage patterns of the Georgetown Properties have been wholly altered as a result of development of townhouses on the property. Rainfall on a majority of the properties, excluding the small yards between the houses and the Potomac River, lands on the roofs of the townhouses. Drainage from the roofs is collected and enters a closed District of Columbia drainage system.

There are no perennial streams on the Georgetown Properties, and no wetlands are present on the properties. The Georgetown properties are within the FEMA-designated floodplain of the Potomac River.

Groundwater flow on the properties is unconfined, flowing to the southwest into the Potomac River. Groundwater is not used as a source of drinking water or other water supply in the vicinity of the Georgetown Properties.

Geophysical Resources

NPS Property

The NPS Property lies within the physiographic province of the Eastern Piedmont Region, which extends through the western District of Columbia to Rock Creek Park. The underlying rocks in this province are primarily granite, gneiss and schist. The topography of the property consists of rolling hills on the southern portion of the property that fall from around 240 ft elevation relative to mean sea level (elev.) to a drainage area that descends eastward across the property to about 150 ft elev. Soils on the property comprise urban land of the Glenelg, Chillum and Manor complexes. A detailed description of the soils on the NPS Property was prepared as part of the Biological Resource Inventory Report, which can be reviewed in Section 5.5 of the Appendix.

Mansion Property

The Mansion Property has the same general geologic and soil characteristics as the adjacent NPS Property. The topography of the property consists of the side slopes and crests of two knolls at about 240 ft elev., one located centrally on the property and another located toward the northern central extent of the property. A prominent swale falls toward the northeast between the two knolls, descending to join the drainage area of the NPS Property.

Georgetown Properties

The Georgetown Properties lie within the same geologic province as the NPS and Mansion Properties. The topography of the property consists of flat land at about 10 ft elev. (beneath the existing townhouses) descending toward the south to the waterline of the Potomac River. The soils on the property are previously disturbed urban fill.

Vegetation and Wildlife

NPS Property

Detailed descriptions of observed and potential vegetation and wildlife species on the NPS property were prepared as part the Biological Resources Inventory Report, which can be reviewed in Section 5.5 of the Appendix.

In general, vegetation cover on the NPS Property is characterized by successional deciduous forest communities developing from a previous garden area of the Brady Estate. Throughout the property, flora consists of a mixture of native and invasive exotic species, some of which were planted when the property was managed as part of the Brady Estate. Portions of the NPS Property that are subject to higher light conditions are characterized by dense growth of vines and shrubs, both native and exotic. Many of the trees on the property are covered with vines. Over time, the vines would be expected to result in negative effects on tree health.

The waterway of the stream that runs through the NPS Property is considered a sensitive habitat along with its surrounding wetland habitat. While habitat exists on the NPS Property that could potentially be suitable for variety of sensitive plants and animals, no rare, threatened, or endangered plants or animals have been documented on the NPS Property. In addition, no notable rare, threatened or endangered species were detected while conducting the biological inventory for the property. Two types of macroinvertebrates observed during the inventory do belong to genera that contain a few rare species. To ensure the accurate identification of these macroinvertebrates, the observed specimens are currently being identified to the species level by an expert aquatic entomologist at the University of Maryland. It has been described as very unlikely that the specimens would be RTE species, however if they are identified as RTE species, specific measures to protect the species would be coordinated between NPS, the Foundation, and U.S. Fish and Wildlife.

In general, the wildlife identified on the NPS Property consists of species that are common in suburban environments. Unusual wildlife observed on the NPS Property during the biological inventory included a “piebald” whitetail deer. Piebald deer are partially white as the result of a recessive genetic trait that usually becomes more prevalent due to overpopulation and inbreeding of a deer herd.

The NPS property likely provides little value as a biological connector due to its location. The property provides little value as a north-south corridor as development occurs in both directions. While the property connects to Glover-Archbold Park on its east end and a partially wooded privately owned lot to the north, the property’s west end is adjacent to a busy 2-lane paved road. Therefore, the property provides little value as an east-west corridor because there is no existing continuous expanse of habitat immediately west of the property, and the property essentially funnels wildlife into Foxhall Road.

Mansion Property

A mix of manicured lawn, planted landscape, and patches of remnant deciduous forest characterize vegetation on the Mansion Property. The remnant forest patches on the property consist of a mixture of native and invasive exotic species. Edges of the forest patches are subject to higher light conditions and are characterized by deleterious vine growth.

The Mansion Property adjoins the forested NPS Property and Glover-Archbold Park. Many of the terrestrial wildlife species that utilize the NPS properties could potentially occur on the contiguous Mansion Property.

No rare, threatened, or endangered plants or animals have been documented on the Mansion Property. The character of the property does not indicate suitable habitat for sensitive species, however the property has not been thoroughly surveyed for such occurrences.

Georgetown Properties

The landscaping of the Georgetown Properties consists of hardscape except for grass and remnant river edge trees near the water line of the Potomac River. The land is isolated from other habitat by built structures.

Due to the greater urban environment within which the Georgetown Properties are situated, the original wildlife species that once inhabited the property have largely been displaced during years of development. The remaining wildlife community on the property is composed primarily of species that are tolerant of developed conditions such as frogs, squirrels, rats, mice and urban birds such as pigeons, sparrows, and starlings.

There has been no documentation of rare, threatened, or endangered plants, animals or insects on the Georgetown Properties. There is no evidence of habitat for such species on the property.

Air Quality

In response to the Clean Air Act of 1970 and the Clean Air Act Amendments of 1977 and 1990, the U.S. Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for the protection of human health and welfare. Current NAAQS are set for carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), particulate matter equal to or less than 10 microns in size (PM₁₀) and fine particulate matter (PM_{2.5}). The EPA assesses the status of compliance with the NAAQS for geographic regions specified throughout the United States. Regions that meet the NAAQS are called “attainment areas,” while regions that do not meet the NAAQS are called “non-attainment areas.” Areas that have been reclassified from non-attainment to attainment status are called “maintenance” areas.

The proposed action would be located within the National Capital Interstate Air Quality Control Region (NCIAQCR). This region includes Washington, D.C.; Montgomery, Prince George’s, Calvert, Charles, and Frederick counties in Maryland; and Arlington, Fairfax, Loudoun, Stafford, and Prince William counties in Virginia; and the City of Alexandria, Virginia. Air pollutant concentrations are measured at monitoring stations throughout the NCIAQCR to evaluate the air quality of the area and to determine compliance with the NAAQS. Ambient air monitoring is conducted in accordance with EPA approved methodologies, standard operating, and quality assurance procedures.

The air in the Washington, D.C., metropolitan area has exceeded the Federal health standard for ozone in 19 of the last 20 years and the region has been designated by the EPA as a “serious non-attainment area” for ozone (EPA, 2001). The number of days per year of violation ranged from a low of 2 to a high of 27. [Federal law allows only one violation of the standard a year (averaged over 3 years) in any one location in the region]. The highest levels of ozone generally occur during the summer, from early May to late October, when the increased temperature and sunlight intensity enhance its formation.

Ozone is a colorless gas with a pungent odor that causes eye irritation and impairment of respiratory function. O₃ is formed in, and downwind from, urban areas when sunlight and high temperatures cause photochemical reactions between emissions of volatile organic compounds (VOCs), and oxides of nitrogen (NO_x), called O₃ precursors. Major sources of VOC include, but are not limited to, motor vehicles, gasoline storage facilities and refueling stations, bakeries, lawnmowers, consumer products and boats. Principal sources of NO_x, which is produced by combustion, include motor vehicles, construction equipment, fossil fuel-fired power plants, and open burning (MWCOG 2000).

In the greater metropolitan Washington, D.C. region, automobile traffic is also a principal source of CO. While it is difficult to associate ozone levels with local traffic levels, because ozone is not emitted directly, CO is directly emitted and concentrates locally around heavily traveled roadways and congested intersections. CO levels tend to be highest in the winter when cold weather causes automobiles to burn gas less efficiently.

Noise Levels

Noise is generally defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance and, in the extreme, hearing impairment. Most environmental noise includes a conglomeration of frequencies from distant sources, which create a relatively steady background noise in which no particular source is identifiable.

Noise levels are measured on a logarithmic scale expressed in decibels (dB). It is widely accepted that the average healthy human ear can barely perceive noise level changes of 3 dBA. Based on the results of many acoustical studies, it has been further accepted that a 5-dBA change is readily perceptible, and a 10-dBA increase is perceived as twice as loud (Caltrans 1998). Human hearing is less sensitive at low frequencies and extremely high frequencies than at mid-range frequencies. Therefore, a method called “A-weighting” is used to filter noise frequencies that are not audible to the human ear. The typical A-weighted noise levels (dBA) associated with various common noise producers are listed in Table 3-1.

While an A-weighted sound level indicates the level of environmental noise at a particular instant, ambient community noise levels vary continuously. Average noise levels over a period of minutes or hours are expressed as dBA L_{eq} , the equivalent median noise level for that period of time. The period of time for the average is specified by denoting the number hours monitored (for example, “ $L_{eq}(3)$ ” denotes a three-hour average). Average noise level standards for land use compatibility are established by various agencies and jurisdictions. A person may not cause or permit noise levels that exceed these noise standards.

Noise sensitive receptors are generally considered to be human activities or land uses that may be subject to the stress of significant interference from noise. Land uses associated with sensitive receptors include residential dwellings, mobile homes, hotels, motels, hospitals, nursing homes, education facilities, and libraries. Sensitive receptors may also include threatened or endangered noise-sensitive biological species. Sensitive noise receptors within the vicinity of the subject sites include educational and residential land uses near the NPS and Mansion Properties, potential raptor nests on the NPS Property, and the residential dwelling and boathouse adjacent to the Georgetown Properties.

Table 3-1 Typical Noise Levels

Common Outdoor Activities	Noise Level dBA	Common Indoor Activities
Jet Fly-over at 1,000 feet (300 meters)	--110--	Rock Band
Gas Lawn Mower at 3 feet (1 meter)	--100--	
	--90--	
Diesel Truck at 50 feet (15 meters), at 50 mph (80 km/hr)	--80--	Food Blender at 3 feet (1 m) Garbage Disposal at 3 feet (1 meter)
Noisy Urban Area, Daytime		
Gas Lawn Mower, 100 feet (30 meters)	--70--	Vacuum Cleaner at 10 feet (3 meters)
Commercial Area		Normal Speech at 3 feet (1 meter)
Heavy Traffic at 300 feet (90 meters)	--60--	
		Large Business Office
Quiet Urban Daytime	--50--	Dishwasher Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference
Quiet Suburban Nighttime		Room (Background)
	--30--	Library
Quiet Rural Nighttime		Bedroom at Night, Concert
	--20--	Hall (Background)
		Broadcast/Recording Studio
	--10--	
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing
<i>Source: Caltrans 1998.</i>		

Hazardous MaterialsNPS Property

Given the current undeveloped character of the NPS Property, and because there has been no known past development of the property, the likelihood of encountering hazardous materials the property is considered extremely low. The NPS will be conducting a Level 1 pre-acquisition survey on this property.

Mansion Property

The development and use of the Mansion Property as a residential estate does not suggest the presence of hazardous materials on the property. Additionally, the Foundation has conducted a Phase I Environmental Site Assessment on the property. The results of the assessment indicated no presence of hazardous materials on the property.

Georgetown Properties

The current residential use of the Georgetown Properties does not suggest the presence of hazardous materials on the property. Additionally, there are no known records identifying hazardous uses or materials on the property. Therefore, the presence of hazardous materials on the property is unlikely. The NPS will be conducting a Level 1 pre-acquisition survey on these properties.

3.2 Cultural Resources

In compliance with Section 106 of the National Historic Preservation Act, consultation regarding the proposed land exchange has been conducted with NPS officials and the District of Columbia Office of Historic Preservation. Historic and cultural resources in the general area around the subject properties date from the earliest human occupation of the New World to the 20th Century. This section describes the prehistoric and historic setting of the subject properties, the known archaeological, historic and cultural resources potentially affected by the alternatives, and the visual character of the area as it relates to the cultural attributes of the subject properties.

Archaeological Resources

The area around the subject properties was likely inhabited in prehistoric times. The Potomac River, Rock Creek, nearby streams, and the Fall Line formed corridors for the movement of prehistoric populations, provided game animals and fish for food sources, and the area's bedrock offered quartzite for making tools and weapons. There is documentary evidence of 18th and 19th century habitations in Georgetown and the surrounding area.

NPS Property and Mansion Property

There is documented evidence of prehistoric sites around the stream that runs through the Glover-Archbold Park. The stream's proximity to both the NPS and Mansion Properties indicates that these properties are likely to have contained prehistoric artifacts in the past. However, late 19th and 20th century construction activities have disturbed the NPS Property to the degree that there is very little probability of any remaining intact archaeological resource eligible for listing on the National Register (Potter 2002). The Mansion Property has been similarly disturbed, but artifacts indicating prehistoric activities have been observed on that property (Potter 2002).

Georgetown Properties

There are no known archaeological resources on the Georgetown Properties.

Historic and Cultural Resources

NPS Property and Mansion Property

Historically, the NPS Property was the property of the Brady family estate. Remnants of a pond have been observed on the property, likely a landscape feature of the estate from the late 19th century.

The Mansion Property, known previously as Valley View Farm and the Brady Estate, was established in 1936 by heiress Elinor Morse Ryan. Ryan married naval officer Parke Howell Brady in 1939. During their marriage, the couple spent much time abroad and rented the home to a series of tenants, including cereal heiress Marjorie Merriweather Post who lived there while Hillwood was being built. In 1996, the property was bought by Sheik Hamad bin Jassim bin Jabar Al-Thani, foreign minister of the emirate of Qatar and a member of its ruling family. At the time, Al-Thani said he would renovate the mansion and live there. He did not, and the property went on the market in July 2000. The Casey Foundation purchased the property in 2001.

Historic and cultural resources located in the vicinity of the NPS and Mansion properties include:

Glover-Archbold Park - Glover-Archbold Park is a National Park Service property that runs along Foundry Branch from the Potomac River to Van Ness Street, N.W. The 183-acre park was established in 1923, when Charles C. Glover, a former Riggs Bank executive, and Anne Archbold, a Standard Oil heiress, donated the land to be used as a bird sanctuary. The park was listed as a District of Columbia Historic Landmark in 1964.

Foxhall Village - The Tudor-style Foxhall Village is south of the Mansion Property between Foxhall and Reservoir roads and 44th Street NW, next to Glover-Archbold Park. The community was built in the late 1920's by Washington developer Harry Boss and the attached houses were intended to be replicas of houses in Bath, England.

German Embassy - The German Embassy is located at 4645 Reservoir Road. The complex, which includes the Chancery and the Ambassador's residence, is situated on a nine-acre parcel at the corner of Foxhall and Reservoir roads.

Georgetown Properties

The townhouses on the Georgetown Properties were built in 1959 and are not historic structures. However, the Georgetown Properties are in proximity to a number of historic and cultural resources. The properties are located within the Old Georgetown Historic District and the Potomac Gorge Historic District and are adjacent to the Potomac Boat Club and the Key Bridge.

Old Georgetown Historic District (National Register) - The Georgetown Properties are located within the Old Georgetown Historic District, which was created in 1950 by an Act of Congress. The district is generally bounded by Reservoir Road and Whitehaven Parkway on the north, Rock Creek Park on the east, the Potomac River on the south and Glover-Archbold Park on the west. The District was placed on the National Register of Historic Places and listed as a National Historic Landmark in 1967.

Potomac Gorge Historic District (DC Landmark) - The Potomac Gorge, also known as the Potomac Palisades, extends approximately 15 miles from Great Falls to Georgetown and includes the area along the Potomac River upstream of the Key Bridge. The district was listed as a District of Columbia Landmark in 1964.

Potomac Boat Club (National Register) - The Potomac Boat Club is located at 3530 K Street, N.W., immediately west of the proposed site. The club, which was constructed circa 1870, was listed as a District of Columbia Landmark in 1973 and was listed on the National Register of Historic Places in 1991.

Francis Scott Key Bridge (National Register) - The Key Bridge was built in 1923 over the Potomac River between the Georgetown section of Washington, DC and Arlington County, Virginia. The bridge was designed by architects Wyeth and Sullivan and incorporates five large segmental arches. The bridge was named in honor of Revolutionary War figure Francis Scott Key, whose house stood near the Georgetown terminus. The bridge was renovated in 1987.

Potomac Aqueduct Bridge Abutment and Pier Ruins (DC Landmark) - The nearby abutment and ruins are the remnants of the canal aqueduct over the Potomac River and are part of the historical Alexandria Canal. Their construction in 1841, which involved pinning the pier pilings to the bedrock 35 feet under the waterline, represents a major achievement in early 19th century engineering. The remnants are owned by the District and were designated a District of Columbia Landmark in 1973.

Visual Resources

The character at and around the subject properties determines the area of visual influence for the alternatives.

NPS Property and Mansion Property

The NPS Property is covered by forest, open shrubland, and wetland. The Mansion Property is a mix of wooded and manicured lawn areas. There is vegetation along the perimeter of the property, especially the northern edge by the NPS property and the southern edge, adjacent to the Berkley neighborhood.

To the south of the properties, Foxhall Village is characterized by large houses on well-manicured lawns. To the west and northwest of the properties, the area is characterized by large schools and institutions set on landscaped lots. To the east of the properties, Glover-Archbold Park is a densely vegetated area with mature plant materials. The park's topography consists of rolling hills similar to the NPS and Mansion Properties. The parkland descends in elevation gradually from north to south.

Traveling toward the north on Foxhall Road, potential views of the Mansion Property exist where Foxhall Road begins to bend to the west past the intersection of Hoban Road. In the summer, full vegetation obscures views of much of the property from the road. In the winter, filtered views are possible from selected portions of the roadway.

Georgetown Properties

The mix of open recreation areas, asphalt parking lots, and office/warehouses surrounding the Georgetown Properties add to an urban appearance. The Georgetown Properties offer pleasant views to the Potomac River, the adjacent boathouse, and other boating areas but are isolated from the vibrant streets of Georgetown and shaded by the Whitehurst Freeway above. This visual isolation adds to the secluded character of the area.

3.3 Socioeconomic Environment

Land Use

All three of the subject properties are located in the Northwest quadrant of Washington, D.C. Land uses in the study area were inventoried to characterize the surrounding context of the project sites. Land use patterns in the study area were compiled from observations during field inspections, aerial photography, maps, existing plans and the Washington, DC land use maps and zoning designations.

NPS Property and Mansion Property

The NPS Property is approximately 4 acres of partially wooded regenerating open space. It is bounded by the intersection of Foxhall Road and Whitehaven Parkway on the west, the vacant land of the former Phillips Estate on the north, Glover-Archbold Park on the east, and the Mansion Property on the south.

The Mansion Property is approximately 17 acres of mixed wooded and cleared residential land. The property is bounded by Foxhall Road on the west, the NPS Property on the north, Glover-Archbold Park on the east, and the Berkeley neighborhood on the south. There is a black, eight-foot steel security fence around the western, southern and eastern property lines.

The properties are surrounded by residential, institutional, community facilities and park uses. Surrounding residential land uses include larger homes, as well as diverse neighborhoods of small homes and townhouses. Nearby institutional uses include Mount Vernon College of the George Washington University, and the German Embassy, which are located across Foxhall Road to the west of the two properties. Nearby parks include Glover-Archbold Park to the east, and a field associated with the federal reservoir system directly across Foxhall Road to the west.

Georgetown Properties

The properties, which are located at 3524 and 3526 K Street, compose approximately 1/10 of an acre. The properties are improved with two adjoining brick townhouses. A third adjoining townhouse at the west end of the row (3528 K Street) is privately owned. The row of townhouses is adjacent to the Potomac Boat Club on the west; K Street/Water Street on the north; Jack's Boats, NPS Parkland and the Key Bridge on the east; and the Potomac River on the south. Although the buildings were constructed for residential use, research and site reconnaissance indicates that businesses operate out of the townhouses.

Surrounding uses include commercial, institutional, and open space. Boating uses, such as the Potomac Boat Club and Jack's Boats flank the properties on the east and west. There are a number of office and residential buildings located along Water Street to the east of the property. The 10-acre Georgetown Waterfront Park, which is planned to be developed as a park from Washington Harbor to the Capital Crescent Trail, is located to the east.

Planning Policies

The Comprehensive Plan for the National Capital, including the Federal Elements (1984, updated 2001) and District of Columbia Elements (1977-1984, updated 1990), provides long-range guidance for planning and development in the District. Specifically, the parks, open space, and natural features element of the Federal Elements contains policies relevant to the management of parks.

As part of the Home Rule Act in 1973, Advisory Neighborhood Commissions (ANCs) were established to provide official citizen representation to other governmental bodies. Currently all of the properties are within ANC2E; however, there is a proposal to include the NPS and Mansion Properties as part of ANC 3D as part of a redistricting effort associated with the November 2002 elections.

NPS Property and Mansion Property

The Federal Elements of the Comprehensive Plan provide that:

“...threads of natural green areas throughout the District including Rock Creek Park and its tributary parks... like Whitehaven Parkway and Glover-Archbold Park... should continue to serve as important natural resources areas... and should be protected and maintained to provide open space amenity for residential areas of the city... These natural areas should be protected from border development that would adversely impact their natural resources and visual quality. The use of generous building setbacks, height controls, the donation of scenic easements, or the transfer of development rights from adjacent landowners should be pursued to ensure protection.

The District of Columbia *Generalized Land Use Map* (1995), which is part of the Comprehensive Plan for the National Capital, designates the NPS Property as “parks, recreation, and open space” and designates the Mansion Property as “low-density residential.”

Currently both properties are within the Foxhall/Georgetown Reservoir Neighborhood Ring in Ward 2 of the District of Columbia. The *Ward 2 Plan* specifically states that:

“1362.2 The Foxhall/Georgetown Reservoir community is very concerned with rising traffic volumes and congestion along Foxhall Road, Reservoir Road and MacArthur Boulevard, and with potential traffic effects and spillovers into their residential area due to possible changes on Canal Road, including a proposed enlarged entrance to Georgetown University. Riverside Hospital and Georgetown Day School, as major institutions at the eastern choke-point area of MacArthur Boulevard, are a source of continuing concern due to traffic generation that aggravates rising commuter traffic from west to east; their pledges to work with neighborhood groups to solve problems will continue to be important.”

While private properties within the District of Columbia are subject to the zoning regulations of the District of Columbia, the regulations have no jurisdiction over U.S. Government properties. Therefore, the NPS Property is not zoned.

The Mansion Property is zoned R-1-B. This zoning category permits matter-of-right development of single-family residential uses for detached dwellings with a minimum lot width of 50 feet and a minimum lot area of 5,000 square feet. The zoning allows maximum lot occupancy of 40 percent for residential uses and 60 percent for all other permitted uses and a maximum height of three stories/forty feet. The zoning allows a 25-foot minimum rear yard and eight-foot minimum side yard. As previously discussed, the R-1-B zoning translates to by-right development of up to eight homes per acre.

Georgetown Properties

The District of Columbia *Generalized Land Use Map* (1995), which is part of the Comprehensive Plan for the National Capital, designates the Georgetown Properties as “parks, recreation, and open space.” In addition, the parks, open space and natural features element of the Federal Elements specifies that the Georgetown waterfront should be publicly owned except at planned locations where private development would be permitted (e.g. Washington Harbour).

The property is within the Georgetown Neighborhood Ring in Ward 2 of the District of Columbia. The Ward 2 plan specifically states that:

“1360.2..... there is [continuing] concern about the impact of development and the crowds on the ambience of commercial and residential Georgetown. Public safety is a [continuing] concern among Georgetown residents and business people. Continuing efforts are needed to address concerns of development impacts, traffic impacts and crowds on residential areas and public safety.

The *Georgetown Waterfront Park Plan*, which was proposed by the National Park Service and approved in 1987 by the National Capital Planning Commission (NCPC), has not been fully implemented. The 1987 plan proposes the acquisition of the waterfront townhouses, specifically:

“A. Waterfront Offices—This proposal would involve the fee acquisition and demolition by the National Park Service of a structure originally built as three 3-story townhouses. These properties represent an inappropriate use in the park which is not water-related or water-dependent.”

The approved plan further recommends eventual NPS development of a scholastic boathouse for high schools rowing programs in the general area currently occupied by the townhouses.

Phase 1 of NCPC’s *Washington’s Waterfront Initiative* (1999) proposed the completion of the 1987 Waterfront Plan, development of a streetscape plan for K Street, and establishment of development guidelines.

The Georgetown Properties are zoned W-1. W-1 zoning permits matter-of-right low-density residential, commercial, and certain light industrial development in waterfront areas. It permits a maximum lot occupancy of 80 percent for residential use, a maximum FAR of 2.5 for residential and 1.0 for other permitted uses and a maximum height of forty feet.

Demographics and Environmental Justice

The 2000 United States Census, which is the most recent and comprehensive data set available, provides the basis for analyzing demographic composition of the study areas. Population, household, and housing unit data are provided to convey the most relevant demographic information. As of the time of this analysis, 2000 income data had not been released; therefore, 1998 income information furnished by the State Data Center was used.

Executive Order 12898¹ requires Federal agencies to: 1) identify any disproportionately high and adverse effects on human health or human environment of minority and/or low-income populations resulting from Federal programs, policies, and activities, and 2) identify alternatives that may mitigate these impacts. Characterization of a group of persons as an “environmental justice community”² requires the fulfillment of one of following three criteria:

- a minority population of the affected area that exceeds 50 percent;
- a low-income population of the affected area that is less than 50% of the median income of a comparison population (e.g. the District of Columbia); or
- a minority population meaningfully greater than the minority population percentage in the general population, or other appropriate unit of geographic analysis.

NPS Property and Mansion Property

Both properties are within Block Group 2 in Census Tract 8.02. This block group is roughly bordered by Foxhall Road to the west, W Street to the north, the eastern edge of Glover-Archbold Park to the east, and the intersection of MacArthur Boulevard and Canal Road to the south. According to the 2000 U.S. Census, there are 1,062 residents in this area. The population is not as racially diverse as the District of Columbia; 8 percent of the study area population is minority, compared to 69 percent in the District as a whole. The average household size of 2.59 is higher than the District’s average of 2.16. The area has 419 housing units, of which only 2 percent are vacant; this vacancy rate is substantially lower than the District’s rate. The area has a high percentage of owner-occupied units - 77 percent, compared to 41 percent owner-occupied units in the District.

¹ “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations” (1994).

² Defined as “a neighborhood or community, composed predominantly of persons of color or a substantial proportion of persons living below the poverty line that is subjected to a disproportionate burden of environmental hazards and/or experiences a significantly reduced quality of life relative to surrounding or comparative communities.”

Table 3-2 Demographic Data: NPS and Mansion Properties

Category	Block Group 2, Census Tract 8.02	District of Columbia
Total Population	1,062	572,059
% Minority	8%	69%
Total Households	410	248,338
Av. Household Size	2.59	2.16
Total Housing Units	419	274,845
% Vacant	2%	10%
% Owner-Occupied	77%	41%

Source: U.S. Census, 2000, Summary Tape File 1

Based on 1998 information by Census Tract, median household income in this area is \$92,546. This income level is substantially higher than the citywide median household income of \$43,011, placing this area in the top quartile of the city.

Analysis of race and income information for the area around the subject properties indicates that there are no environmental justice communities in this area.

Georgetown Properties

The Georgetown Properties are located in Block Group 4, in Census Tract 2.02. This block group is bordered by Georgetown University to the northwest, P Street between 37th and 35th Streets to the north, M Street to the northeast, Wisconsin Avenue to the east, and the Potomac River to the south. According to the 2000 U.S. Census, there are 1,017 residents in the area. Of the population, 14 percent is minority, compared to 69 percent in the District as a whole. The average household size of 1.93 is lower than the District's average of 2.16. The area has 562 housing units, of which 7 percent are vacant. Fifty-three percent of the occupied units are occupied by owners, compared to 41 percent owner-occupied units in the District.

Table 3-3 Demographic Data: Georgetown Properties

Category	Block Group 4, Census Tract 2.02	District of Columbia
Total Population	1,017	572,059
% Minority	14%	69%
Total Households	523	248,338
Av. Household Size	1.93	2.16
Total Housing Units	562	274,845
% Vacant	7%	10%
% Owner-Occupied	53%	41%

Source: U.S. Census, 2000, Summary Tape File 1

Based on 1998 information by Census Tract, median household income in this area is \$121,133. This income level is substantially higher than the citywide median household income of \$43,011, placing this area in the top quartile of the city.

Analysis of race and income information for the area around the subject properties indicates that there are no environmental justice communities in this area.

Community Facilities

There is no public use of the NPS Property, Mansion Property, or Georgetown Properties. The properties do not contain trails or other public use amenities.

Community and public facilities have been identified in the vicinity of the three subject properties using a variety of sources, including maps, internet research, site reconnaissance, and local government documents. As documented in the following sections, facilities in the vicinity of the properties fall into three broad categories:

- *Parks and Recreation Facilities*, which include federal and local parks, open areas, and recreation center;
- *Educational Facilities*, which include schools, continuing education centers, and libraries; and
- *Public Safety Services*, which include police, fire, emergency medical services (EMS), and healthcare.

NPS and Mansion Property

Parks and Recreation Facilities: Glover-Archbold Park, which is adjacent to the NPS and Mansion properties, offers natural open space and hiking trails. The 3.1-mile Glover-Archbold Trail runs from Van Ness Street to the Capital Crescent Trail and the C & O Canal Tow Path. Glover-Archbold Park physically connects to Whitehaven Parkway to the east that, in turn, connects to Rock Creek and Potomac Parkway by way of Dumbarton Oaks and Montrose Parks. Foxhall Park, an unstaffed park in the DC park system, is located at 4800 Ashby Street northwest of the study area. Hardy Recreation Center at 45th and Q Streets offers a variety of athletic fields, courts and picnic areas.

Educational Facilities: There are a number of private schools in the area: St. Patrick's Episcopal School, the Lab School of Washington, Our Lady of Victory Catholic School, the lower/middle school of Georgetown Day School, Rock Creek International School, the River School, and the Field School. Mount Vernon College at the George Washington University is located on a 23-acre wooded campus at the intersection of Whitehaven Parkway and Foxhall Road, northwest of the NPS and Mansion properties. Libraries in the area include the Palisades Regional Branch Library, which is located northwest of the properties at 4901 V Street.

Public Safety Services: The study area is within District Two, Police Service Area 203 of the Washington, D.C. Metropolitan Police Department. The closest Fire and Emergency Medical Services Company to the study area is Engine Company 29 (Truck Company 5), which is located at 4811 MacArthur Boulevard. The closest medical facility is Georgetown University Medical Center at 37th and O Streets.

Georgetown Properties

Parks and Recreation Facilities: The Georgetown Properties are within the designated boundary of the Georgetown Waterfront Park, land that is to be developed into a NPS park, and is also surrounded by an abundance of other parks and recreation facilities. The Potomac River and the C & O Canal offer numerous activities for outdoor enthusiasts, such as boating, canoeing, and birdwatching. The adjacent Potomac Boat Club and nearby Washington Canoe Club offer organized rowing practices and races. Biking, hiking and walking activities are accommodated along the nearby Capital Crescent Trail and the C & O Canal Towpath. The Capital Crescent Trail is an 11-mile, rail trail that starts at Water Street under the Whitehurst Freeway and the Key Bridge and ends in Bethesda, Maryland. The C & O Canal National Historical Park runs for 184.5 miles from Washington, D.C. to Cumberland, Maryland and the Towpath is part of the National Park Service's Potomac Heritage National Scenic Trail. The Georgetown Recreation Center is an additional recreation resource in the area.

Educational Facilities: Nearby educational facilities include Georgetown University, Holy Trinity School, and Hyde Elementary School. Libraries in the area include the Georgetown Regional Branch Library, which is located at 3260 R Street near Wisconsin Avenue.

Public Safety Services: The study area is within District Two, Police Service Area 205 of the Washington, D.C. Metropolitan Police Department. The closest Fire Department to the study area is Medic Unit 2R, 5th Battalion, which is located at 3412 Dent Place. The closest medical facility is Georgetown University Medical Center at 37th and O Streets.

Economics

The Georgetown/West End submarket is an active market for smaller commercial real estate property. Average DC asking rent for office space is \$38.33 per square foot; average asking rent for the 44 active Georgetown/West End properties is slightly lower at \$31.50. The vacancy rate for all office buildings in the Georgetown submarket is 6.2%, which is slightly higher than the citywide average of 5.7%. In general, the area is not considered an optimal location for large commercial office buildings because of the area's lack of a Metro station, the low availability of convenient parking, and the relatively high parking costs.

The retail market in the Georgetown area is a mix of national upscale retail outlets, smaller local or regional outlets, and restaurants. The primary concentration of retail outlets and restaurants is located along M Street and Wisconsin Avenue. Neighborhood-oriented retail, such as convenience stores and service stations, is located farther from the retail core.

A search of residential properties for sale in the 20007 zip code revealed that there are 74 active properties. The asking prices of the properties range from \$5.95 million for a property on the Georgetown Waterfront to \$88,000 for a property in Glover Park. The median asking price for the active properties was \$895,000.

Property tax currently received from the properties is based on information received from the DC Office of Tax and Revenue. Class 1 property, which is residential real property (including multi-family), is taxed at \$0.96 on each \$100 of the assessed value of the property. Class 2 property, which is commercial, industrial, hotels, and vacant or abandoned real property, is taxed at \$1.85 on each \$100 of the assessed value of the property.

NPS Property and Mansion Property

The NPS Property, which is Lot 804 of Square 1346, has a Tax Year 2003 estimated assessment of \$2,361,679. No property tax is received from this site because it is owned by the Federal government.

The Mansion Property is comprised of Lots 3, 4, 801, 802 and 803 (which is comprised of Lots 823 and 824) of Square 1346. Estimated Year 2003 assessments and payables taxes for these lots are enumerated below.

Table 3-4 Property Tax Data: Mansion Property

Lot Number	Proposed 2003 Property Value	Proposed 2003 Property Tax
Lot 3	\$ 350,570	\$3,365
Lot 4	\$ 216,200	\$2,075
Lot 801	\$ 468,980	\$4,502
Lot 802	\$ 234,680	\$2,253
Lot 823	\$ 4,519,620	\$43,388
Lot 824	\$ 5,405,410	\$51,892
Total	\$11,195,460	\$107,475

Georgetown Properties

The properties include Lot 808 (3524 K Street) and Lot 810 (3526 K Street) of Square 1179. Based on Tax Year 2003 preliminary estimates, Lot 808 has an estimated assessment of \$537,640 (\$179,040 of which is the land value). A payable tax of \$ 5,161 is estimated for this property. Based on Tax Year 2003 preliminary estimates, Lot 810 has an estimated assessment of \$371,690 (\$100,740 of which is the land value). A payable tax of \$ 3,568 is estimated for this property.

3.4 Transportation and Urban Systems

The subject properties are accessible from a regional transportation network that consists of several modes of transport. This section addresses the transportation system components that are applicable to the alternatives including automobile transportation and alternative transportation modes (including public transportation, bicycle, and pedestrian systems).

Automobile Transportation

NPS Property and Mansion Property

The property line between the NPS and Mansion Properties is adjacent to the intersection of Whitehaven Parkway and Foxhall Road. There is no existing vehicular access or parking associated with the NPS Property. As indicated by remains evident on the NPS Property, movement of deer across Foxhall Road results in recurring deer kills by automobiles.

Existing vehicular access to the Mansion Property is from Foxhall Road to the south of this intersection. Parking for visitors to the Mansion Property is located entirely within the boundary of the property.

Heavy congestion is currently created at the intersection of Whitehaven Parkway and Foxhall Road by traffic associated with George Washington University at Mount Vernon College and the St. Patrick's Episcopal, Our Lady of Victory, and the Lab School located along Whitehaven Parkway between Reservoir Road and Foxhall Road. To address this congestion, the District of Columbia Department of Transportation has developed plans to add a traffic signal to control movement at this intersection by the end of 2002 (Traffic Services Administration 2002).

Georgetown Properties

The Georgetown Properties are accessed by Water Street, beneath the Whitehurst Freeway Bridge. Parking for the townhouses occupying the properties is located on the ground floor of the townhouses.

Alternative Transportation

NPS Property and Mansion Property

The NPS Property and Mansion Property are accessible from public transportation by walking less than 1000 feet from a public bus stop.

Pedestrian systems near the NPS and Mansion Properties include a sidewalk on the east side of Foxhall Road that extends from Reservoir Road to the Mansion Property. A trail also extends through Glover-Archbold Park past the eastern end of the NPS Property, however the trail is inaccessible from the property due to distance and dense vegetation.

Georgetown Properties

The Georgetown Properties are accessible from public transportation by walking less than 1000 feet from a public bus stop. A pedestrian and bicycle path extends along Water Street past the Georgetown Properties connecting to the Capital Crescent Trail just west of the properties.

Utilities

NPS Property

No utilities are currently present on the NPS Property.

Mansion Property

Residential utilities associated with the demolished Brady Mansion are present on the Mansion Property.

Georgetown Properties

Residential utilities associated with existing townhouses are present on the Georgetown Properties.